

**PRESENCE OF MIND.**—An extraordinary instance of presence of mind lately occurred at the quarries in the Ross of Mull, Argyllshire, on brought for the pier in connection with the Skerryvore Lighthouse, by the Commissioners of Northern Lighthouses. On the 17th ult., at Mr. Charles Barclay, the foreman of the quarries, was engaged in removing a splitter of stone from the face of a block of ten tons weight, which lay on an inclined ledge above him, the block slid forward and enclosed his left hand, which was bruised to such a manner that two of his middle fingers were destroyed, and the sharp points of rock came in contact at the palm of the hand, so that it was held completely fast, as in a vice. In this dreadful situation, Mr. Barclay's great presence of mind and strength of nerves proved the means of saving his life and those of the men who were along with him. The first impulse of the men was to try to lever to raise the stone and liberate the prisoner; and had Mr. Barclay's presence of mind deserted him, or had he fainted under the excruciating torture he endured, this rash purpose would have been executed, and the stone would have launched forward and crushed him and his comrades beneath its mass. He, however, was enabled to direct their proceedings with a wonderful degree of composure, and after some fruitless attempts to raise the block, Mr. Barclay resolved to cut out the stone round his hand as the only means of escape. This painful operation occupied about twenty minutes, during which time the torture he endured did not prevent his working with the remaining hand in effecting his liberation from his extraordinary captivity. Mr. Barclay afterwards walked without assistance to the neighbouring village of Buncrana, two miles off, where Dr. McDiarmid, a gentleman who had lately returned from the Arctic expedition under Ross, removed the shattered bones. Next day Dr. Campbell, who acted as surgeon to the Skerryvore works, arrived from Tyree, and conveyed his patient to the barracks at Spanish Workyard, where he is fast recovering.—*Scottish Guardian.*

Mr. Thomas Rumball, who has been for some time past a pupil, and employed under the superintendence of Sir J. M. Brunel, the engineer, had the honour of submitting on Wednesday last, to his Royal Highness Prince Albert, a drawing representing a longitudinal section of the Thames Tunnel. The Prince Consort, in a letter from the Honourable G. E. Anson, expressed himself warmly interested with the inspection. The drawing is 12 feet in length, exhibiting the tunnel with the two shafts and staircases for foot passengers, and the shipping above, giving to it not only importance as a record of the engineering difficulties of this truly great work, but a highly graphic and interesting description. It is furnished with a scale of weekly progress, showing the number of feet and inches made during the space of one week; on the same scale is marked the places where the eruptions of the river occurred. We were highly pleased with this clever drawing, combining the most laborious exactness with a perfect and correct delineation, and have great pleasure in pronouncing it as very creditable to this young gentleman's taste and talent.

**DAMP IN WALLS OR FLOORS.**—Last week it was necessary for some workmen to descend a well at Beaton Rydals, near Leeds, the depth of which is 23 yards. Upon trying it with a lamp the flame was extinguished by the damp within four yards from the top. The common remedy was then tried for dispelling it, by throwing in a quantity of water. When about a dozen buckets full had been used, it was found that the damp had only been raised about a yard and a half nearer to the top. Close by was some quick lime, which it was suggested by a bystander to try, and a bucket full was cast into the well, which had an instantaneous effect, and in less than five minutes the engine-man descended to regulate the pump at the bottom of the well, without the slightest obstruction from the damp. So simple a remedy, in a district where fires are frequently lost from the effects of the damp, is well worth remembering.—*Leeds Mercury.*

A few days since, as Mr. Doncaster, builder, of Wharfedale, and four or five other persons were in the act of putting up a cornice round the ceiling of the New Temperance Hall, lately erected in that town, the scaffolding upon which they were standing gave way, and precipitated them all to the ground, being a height of, at least, six or eight yards. Fortunately no bones were broken; but besides being severely shaken, they were all more or less bruised, particularly Mr. Doncaster, who, we ascertained, is now confined to his bed in consequence.

The astonishing power with which God has endowed the vegetable creation to multiply its seed, and the true producers of thousands, hundreds, and even, may be millions of seeds, and each of these seeds has the power of producing the same number.

**St. Paul's Clock.**—The following are the dimensions of the outside of the clock in St. Paul's Cathedral:—

Diameter of dial plate	18 10
Hour hand	5 8
Minute hand	9 8
Hour figures, each	1 0
Minute figures, each	2 2
Minute strokes	0 6
Rim to the minutes	45 0

Accumulation of power arises from lifting a weight and then allowing it to fall. A man, even with a heavy hammer, might strike repeated blows upon the head of a pile without producing any effect. But if he raises a much heavier hammer to a much greater height, in full, though for him frequently repeated, will produce the desired effect.

**SOUTH-EASTERN RAILWAY.**—The viaduct over the Poord valley was finished on the 13th Nov., and on the following day the engine and tender passed over for the first time. The viaduct itself was ornamented with flags, and the men employed on the works were treated. It must be gratifying to the feelings of the contractors, Messrs. Grissell and Peto, that this stupendous work has arrived at completion, without any appearance of settling in any part, and without the loss of any one employed on the works. We understand this is one of the highest viaducts in England.—*Suffolk Paper.*

**QUADRATURE OF THE CIRCLE DISCOVERED.**—A Quadrature informs us, that the question which has engaged the attention of the mathematical world, and respecting which so many unsuccessful attempts have been made, in order to ascertain the true proportion borne by the diameter of a circle to its circumference, has at length been discovered. By many this has been thought impracticable; but the important desideratum has been gained by G. Batt, land-surveyor, of Longfleet, near Poole, who, after fifteen years' application and intense study, is enabled to show by diagram the true contents of the circle in all its parts, and every part drawn with its contents demonstrated by rules founded on Euclid.—*Wiltshire Paper.*

**GROWTH OF LONDON.**—Since the year 1829, according to inquiries made by the commissioners of police, no less than forty-five thousand new houses, forming seven hundred and fifty new streets and squares have been erected, or are in the course of building in London and the suburbs.

In France, our iron, made as it usually is with charcoal, costs three times the price of the cast-iron out of which it is made; whilst in England, where it is usually made with coke, the cost is only twice the price of cast-iron.

**NOTTINGHAM.**—A new circus has just been completed here for Cooke's company of equestrians. It is erected to a most substantial manner, Mr. Hunter being the builder, and Messrs. H. and W. Lewin the slaters. It is 100 feet long and 80 feet wide.

The British Association has, since its establishment, expended \$3,000, in scientific investigations.

#### PRICE CURRENT OF TIMBER GOODS IN HULL.

<b>TIMBER.</b> Riga, per load.					
best	£4 12 6	to	£5 0 0		
Memel, best	4 10 0		0 0 0		
Dantzig	4 7 6		0 0 0		
Memel, Seconds	3 12 6		0 0 0		
Quebec red	3 10 0		3 0 0		
Lowport ditto	2 15 0		3 0 0		
Quebec yellow	3 5 0		3 10 0		
Lowport ditto	3 0 0		0 0 0		
Quebec Oak, per foot	0 2 0		0 2 6		
Elm	0 1 6		0 0 0		
Memel and Riga Green					
Wainscot Logs, per foot	0 5 0		0 5 6		

<b>DEALS.</b> Archangel and Ouga	18 10 0	to	0 0 0		
Petersburg red, best	16 0 0		0 0 0		
Seconds	14 5 0		0 0 0		
Wyburg ditto	14 15 0		15 0 0		
Memel	14 5 0		0 0 0		
Petersburg White Deals	15 0 0		0 0 0		
Riga ditto	14 0 0		0 0 0		
Quebec first	15 10 0		0 0 0		
Second	11 0 0		0 0 0		
Spruce	10 10 0		11 10 0		
<b>STAVES.</b> Memel, crown	17 0 0		0 0 0		
Quebec, single	0 0 0		0 0 0		

—Hull Packet.

#### TO OUR CORRESPONDENTS.

"F. A. G."—In his *Structure* on the Camden Society, commits, we fear, a similar error to that which he deprecates. It is not necessary to rescue the grains of a Cockrell or a Wilkins from the whiffles of every gully assistant nor to mislead in a controversy on a point of art imputation against the religion of any man or set of men. We shall endeavour to embody "F. A. G.'s" remarks in another form with his permission.

"Kala Technen" received; will be weighed and observed.

"WOOD PAVING."—"S. B." is anxious to see wood pavements extensively adopted, but dwells upon one "grand defect" in the insufficient foundations for which he says he has a remedy. His address is, with the above initials, care of Mr. Gladding, bookbinder, Whitechapel Road, and he says he will be happy to communicate his plan at a few relations, every one having, as he says, a right to live by his wits as well as his labours, and especially in a matter for the public benefit. The public can well afford something for improvement after so much waste of wealth on imperfect systems.

"Scroll and Curtain Step."—We have received two drawings, and may have more, for which we will wait a few days, and then select the best.

"MILTON'S PERSPECTIVE."—"J. W." inquires the price and where one could be purchased.

"Mr. Green."—"We thank him for his proffered favours, but cannot pay for it.

"G. S." on *Shew Archer*, is unaccountably posted.

"A. K."—The price of 4-inch Portland cement will vary much according to the size, on which it is from 1s. 4d. to 2s. 1d. per foot superficial. We are happy to inform him that his wishes will be met. An annual index is in preparation.

"J. L. T. Brecon." shall have our earliest attention, as he has also our best thanks.

"H."—We can unfeigningly assure him that we shall be most happy to give him satisfaction.

"P. P."—A rectangle is a figure of four sides and four right angles. A square is a rectangle, but it is not necessary to a rectangle that the four sides be equal, two parallel sides may be longer than the other two.

"O. S."—He is mistaken in ascribing the inquiries to the quarter named. We are, however, very glad and much interested in the little account he gives, and sympathize with him as to the last detail of circumstances. Let us hope that he will reward of honest section may fall where it is so well due, and so much needed.

#### NOTICES OF CONTRACTS.

Two following contracts are advertised in different papers, and we have kept a register of the particulars of each at the office, which may be referred to on application. In the continuation of this plan, which we flatter ourselves will be of service to our readers, material assistance will be rendered by the forwarding of papers from our country friends, or by any other means of notification of which they may choose to avail themselves.

**ENLARGEMENT OF SUFFOLK LUNATIC ASYLUM.**—Specifications, Ac.—Dr. Kirkman, the Asylum J. H. Barton, Clerk of the Peace, Bury St. Edmunds. January 23, 1844.

#### COMPETITIONS.

Earl of Leicester's Monument, at Holkham, cost 4,000 guineas.—R. N. Bacon, Hon. Secretary Dec. 30.

District Surveyor for the metropolitan parishes of St. George-the-Martyr, and St. Andrew, Holborn-above-the-Bars, and the Liberty of the Rolls—Testimonials to be sent in up to 30th December. Election next January Sessions.—C. H. Ellis, Clerk of the Peace.

Design for a testimonial to the late G. (brooding, Esq., to be executed at Westport, at a price of 800 guineas.—Dr. Dillon, Infirmary, Castlebar, Mayo. 20 guineas, Jan. 1, 1844.

Premium of a gold medal or money for the best mode of cleansing streets.—March 1, 1844. J. N. G. Gatch, 20, Vere-street.